

THE FAMILIES OF TEACHERS

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SINCE adults are rarely willing to submit to intelligence tests, most of the studies of the relation between intelligence and family size have used children's scores as an indication of the level of parents' intelligence. There may therefore be some interest in the results of an investigation in which data on marriage and families of a group of men and women in their early forties are compared with the scores they themselves made in an intelligence test some twenty years previously. Comparable follow-up studies have been made by Terman (1947) on gifted children, Moberg (1950) on Swedish students, and Hutton (1953) on English public school boys; and there are several on American graduates. The present investigation, unlike these, was confined to a single profession, to university graduates who had become teachers.

An intelligence test (the verbal Simplex Group Test; in a shortened 45-minute version) was applied in sessions 1930-34 by Professor Rex Knight of the University of Aberdeen to 335 graduates who began their training as teachers in Aberdeen during these years. Some twenty years later, in 1953, 266 (80 per cent) of those tested were traced. Excluding twenty-eight who had left the teaching profession, fourteen who had emigrated and two who had died, the remaining 222 (92 men, 130 women) appeared to be a fairly representative group of graduate teachers: their mean score in the intelligence test was 62.4 (standard deviation 10.6), compared with a mean of 60.5 (standard deviation 12.1) among 705 graduate teachers-in-training tested in Aberdeen throughout the 1930s. Much of the information gathered about these 222 teachers was used in a validity check on predictive assessments made during professional training (Nisbet, 1953).

Marriage Rate and Family Size

As the teachers who collaborated in this inquiry are now in their early forties, the

marriage rate and size of families of the group are now probably close to what they will finally be. There may still be additions to the families of the men, and even some further marriages in the group, but the families of the women are nearly completed.

Eight-five of the ninety-two men (92 per cent) have been married; seventy-eight of the 130 women (60 per cent) have been married. The proportion of childless couples among those married is 18 per cent among the men teachers and 16 per cent among the women teachers. As would be expected, age at marriage is a factor in childlessness among the women. The proportion of childless marriages among women teachers married before the age of thirty is only 5 per cent; among those married at or after age thirty, it is 29 per cent. Comparable figures for the men teachers are: married before thirty, 17 per cent childless; married at or after thirty, 18 per cent childless.

None of the group has more than four children. The total number of children of the ninety-two men (that is, of the seventy with families) is 150: twenty-one have a single child, twenty-two have two, twenty-three have three and four have four children. The total number of children of the 130 women teachers (that is, of sixty-six with families) is 142: sixteen have a single child, twenty-eight have two, eighteen have three and four have four. Thus the average size of family among those who have families is 2.1, just above replacement; but the number of children is not nearly adequate for replacement of the group when the unmarried and childless are included.

The median age at marriage is twenty-nine, the earliest age twenty-three, among both men and women teachers. The cumulative percentage of men teachers married at various ages corresponds closely to the results reported by Moberg (1950) from study of a comparable group of male Swedish students born in 1910.

Percentage Married at Various Ages

| | Age | 24 | 27 | 30 | 33 | 36 | 40 |
|-------------------------------------|-----|----|----|----|----|----|----|
| Scottish teachers (men). | | 2 | 25 | 61 | 75 | 83 | 90 |
| Swedish matriculated persons (men). | | 2 | 22 | 57 | 75 | 85 | — |

Age at marriage is related to the number of children of the marriage. The mean number of children of the men who were married before the age of thirty is 1.89; of the men married at or after thirty, 1.63. The mean number of children of the women married before thirty is 2.25; of the women married at or after thirty, 1.26. The correlation between age at marriage and size of family is, among the eighty-five men, -0.15 ; among the seventy-eight women, -0.53 .

Intelligence Test Scores

Although the test used showed a fairly wide distribution of raw scores, the scatter of intelligence in this group is much smaller than in an unselected population. Selection for intelligence had occurred throughout their education, particularly at entry to secondary school, at university entrance and at graduation. It is not surprising that correlations involving intelligence are all much attenuated.

The correlation between intelligence test score and number of children was $+0.06$ among the eighty-five married men, -0.02 among the seventy-eight married women. The correlation between age at marriage and test score was -0.18 among the men, -0.06 among the women. There was no significant difference between the mean test scores of the married and the unmarried (mean scores: married men 65.7; unmarried men 62.3; married women 60.7; unmarried women 59.7).

In 142 cases, the number of the teacher's own siblings was known, and in this group the correlation between test score and number of siblings was $+0.11$. The following correlations were based on the 107 married among these 142: between test and number of sibs, $+0.10$; between test and number of children, $+0.02$; between number of sibs and number of children, $+0.05$. The parents

of this group of 107 married teachers had had a total of 382 children: the 107 themselves have had only 198 children. The two generations, however, are not directly comparable, the earlier being less selected and, by regression, being likely to show greater fertility.

Summary and Conclusions

Of 335 teachers originally tested between 1930-34, particulars as to marriage and children were obtained of 222, now in their forties. In this group of 222 teachers, marriage tends to be late and family size small. Two-fifths of the women have not married at all, and almost a third of those who were over thirty when they married have no children. The marriage rate of the men is about average for the population, and the size of their families is less affected by age at marriage. Though those with families average just over two children per family, the number of children of the group is not adequate for replacement when the unmarried (27 per cent of the total) and the childless (17 per cent of those married) are included.

Census figures show how differences between various social groups tend to create a dysgenic situation in respect of intelligence. Within this professional group, some of these dysgenic trends are greatly reduced or disappear: for example, the relation of intelligence with family size, with age at marriage, with celibacy or with childlessness. However, attenuation of correlation coefficients involving intelligence would be expected in this selected group, and the number of cases is too small to distinguish whether the correlation has disappeared or is merely masked by sampling errors.

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